Waste Management Disposal)	Departmental
Services of Maine)	Findings of Fact and Order
Somerset County)	Air Emission License
Norridgewock, Maine)	Amendment #3
A-816-71-D-M		

After review of the air emission license minor revision application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. <u>REGISTRATION</u>

A. Introduction

Waste Management Disposal Services of Maine (WMDSM) of Norridgewock, Maine was issued Air Emission License A-816-71-A-N on October 30, 2001. The license was subsequently amended on January 11, 2002 (A-816-71-B-A) and again on May 1, 2002 (A-816-71-C-A).

WMDSM has requested an amendment to their license to add two emergency generators at the Phase 9 and 11 landfill gas flare stations to be used as emergency power backup during outages as well as periods when voltage spikes are occurring to protect the existing equipment.

B. Emission Equipment Changes

Emergency Equipment

	Max. Capacity		Power Output
Equipment	(MMBtu/hr)	Fuel, %S	
Generator 1	0.9	Diesel fuel, 0.05% S	129 HP
Generator 2	0.7	Diesel fuel, 0.05% S	100 HP
Generator 3	1.2	Diesel fuel, 0.05% S	144 HP

Bold depicts new unit.

C. Application Classification

The modification of a minor source is considered a minor revision based on whether or not expected emission increases exceed 4 tons per year for a single pollutant or over 8 tons per year of combined regulated pollutants. Given the fact that the total increase in regulated pollutants is 2.2 tons per year, this modification is determined to be a minor revision and has been processed as such.

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II. MINOR MODIFICATION DESCRIPTION

A. New Phase 9 and Phase 11 Generators

WMDSM has requested an amendment to their license to add two emergency generators (Generator 1 and Generator 2) at the Phase 9 and 11 landfill gas flare stations to be used as emergency power backup during outages as well as periods when voltage spikes are occurring to protect the existing equipment.

Generator 1 is an 80 kW WhisperWatt generator coupled to a 129 HP John Deere diesel engine. Generator 2 is a 70 kW WhisperWatt generator coupled to a 100 HP Komatsu diesel engine.

BACT for the emergency generators is the following:

- 1. SO₂ emission data was based on fuel sulfur mass balance.
- 2. MEDEP Chapter 106 regulates fuel sulfur content, however the use of 0.05% sulfur by weight fuel is BACT.
- 3. PM, PM₁₀, NO_x, CO and VOC emission rates were based upon AP-42 data dated 10/96 for diesel engines smaller than 600 hp.
- 4. An operational limit of 500 hours per year for each generator.
- 5. Opacity from Phase 9 Emergency Diesel and Phase 11 Emergency Diesel each shall not exceed 20% on a six- (6) minute block average basis, except for two (2) six (6) minute block averages in a 3-hour period.

B. Revised Facility Emissions

Total Annual Emissions

(based on a 12 month rolling total) (used to calculate the annual license fee)

Pollutant	Flares	Generator 1	Generator 2	Generator 3	Total
					Tons/year
PM	22.34	0.07	0.05	0.09	22.6
PM ₁₀	22.34	0.07	0.05	0.09	22.6
SO_2	99.86	0.01	0.01	0.01	99.9
NO_X	17.87	1.00	0.77	1.32	21.0
СО	97.24	0.22	0.17	0.29	97.9
VOC	1.05	0.08	0.06	0.11	1.3
HAP	0.16	-	-	-	0.2

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III. AMBIENT AIR QUALITY ANALYSIS

According to the Maine Regulations Chapter 115, the level of air quality analyses required for a non-major source shall be determined on a case-by-case basis. Based on the information available in the file, and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this minor revision.

ORDER

Based on the above Findings and subject to conditions listed below the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-816-71-D-M, subject to the conditions found in Air Emission License A-816-71-A-N, amendments A-816-71-B-A and A-816-71-C-A and in the following conditions:

The following replaces Condition (22) of License A-816-71-B-A (Amendment #1):

(22) Emergency Generators

- A. Generator 1, Generator 2 and Generator 3 each shall be limited to 500 hours per year of operation, based on a 12 month rolling total. An hour meter shall be operated and maintained on each unit.
- B. The sulfur content of the fuel shall be less than or equal to 0.05% by weight documented by fuel receipts from the supplier.
- C. A log documenting the dates, times and reasons of operation for each generator shall be kept.

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D. Emissions from the Diesel 1 shall not exceed the following:

Pollutant	lb/hr
PM	0.28
PM_{10}	0.28
SO_2	0.05
NO_x	4.01
CO	0.86
VOC	0.32

E. Emissions from the Diesel 2 shall not exceed the following:

Pollutant	lb/hr
PM	0.23
PM_{10}	0.23
SO_2	0.04
NO_x	3.09
CO	0.67
VOC	0.25

F. Emissions from the Diesel 3 shall not exceed the following:

Pollutant	lb/hr
PM	0.37
PM_{10}	0.37
SO_2	0.06
NO_x	5.29
CO	1.14
VOC	0.42

- G. Visible emissions from <u>each</u> diesel generator shall not exceed 20% opacity on a six (6) minute block average, except for no more than 2 six minute block averages in a 3 hour period.
- H. The emergency generators may be operated periodically for test purposes, planned utility maintenance power outages, periods when voltage spikes are occurring to protect existing equipment and during emergencies (as defined in Chapter 100 of the Department's regulations). WMDSM shall <u>not</u> operate the emergency generators as Dispachable Load Generators (load shedding).

Waste Management Disposal Services of Maine Somerset County Norridgewock, Maine A-816-71-D-M)))) 5	Findings of 1	sion Licens	
The following is a new Condition:				
(29) This amendment shall expire A-816-71-A-N.	concurrently	with Air	Emission	License
DONE AND DATED IN AUGUSTA, MAINI	E THIS	DAY OF		, 2003.
DEPARTMENT OF ENVIRONMENTAL	PROTECTIO	ON		
BY: DAWN R. GALLAGHER, CO	MMISSIONE	R		
PLEASE NOTE THE ATTACHED SHEET F	OR GUIDANO	CE ON APPEA	AL PROCED	URES
Date of initial receipt of application				
Date filed with the Board of Environmenta	al Protection _			
This Order prepared by Mark E. Roberts, Bureau of Air Quality				